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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,084	04/09/2001	Daniel R. Joseph	DRJ 04524 PTUS	7420
7590 Daniel R. Joseph Suite 101 2125 South Great SW Parkway Grand Prairie, TX 75051			EXAMINER OCHYLSKI, RYAN M	
			ART UNIT 1791	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/829,084	<b>Applicant(s)</b> JOSEPH, DANIEL R.	
	<b>Examiner</b> RYAN OCHYLSKI	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-22 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-11, and 16-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This is a non-final Office Action in response to Applicant's Request for Continued Examination of June 12, 2009, which was in reply to a Final Office Action mailed on April 20, 2005. The application was granted revival by petition as of March 1, 2010. Claims 1-3 and 6-11 have been newly-amended, Claims 4 and 5 remain canceled, and Claims 16-22 have been newly-added.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 12, 2009 has been entered.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-3, 6-11, and 16-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Claim 1 limitation “means for varying a quantity of air within said extruded film tube” as well as the later Claim 1 reference to “said means for varying” use the phrase “means for” or “step for”, but it is modified by some structure, material, or acts recited in the claim. It is unclear whether the recited structure, material, or acts are sufficient for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph, because the claimed inclusion of a supply blower and an exhaust blower would appear to be sufficient for varying the quantity of air without additional means therefor.

If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that the phrase “means for” or “step for” is clearly **not** modified by sufficient structure, material, or acts for performing the claimed function.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that it will clearly not be a means (or step) plus function limitation (e.g., deleting the phrase “means for” or “step for”).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-3, 6-11, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joseph (US 5,525,277 A, hereinafter Joseph) in view of Schott, Jr. (US 4,402,656 A, hereinafter Schott).

9. Note that the claims are directed towards an apparatus and as such will be examined under such conditions. The material worked upon or the process of using the apparatus are viewed as recitation of intended use and are given little patentable weight (Please see MPEP 2114 R1-2115 R2 for further details).

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10. Regarding Claims 1 and 2, in a blown film extrusion apparatus in which film is extruded as a tube from an annular die 705 and then pulled along a predetermined path and located within an adjustable sizing cage, an apparatus for positioning said adjustable sizing cage, comprising:

(a) means for varying a quantity of air within said extruded film tube, including:

(1) a supply blower 729 which supplies air to said extruded film tube in an amount corresponding to a supply control signal, and

(2) an exhaust blower 749 which exhausts air from said extruded film tube in an amount corresponding to an exhaust control signal;

(b) a controller member 753 including executable program instructions which define at least one control routine for automatic and coordinated control of said means for varying during starting operation of said extruded film tube by directing a series of supply control signals to said supply blower and/or exhaust control signals to said exhaust blower (Column 14 Line 3 - Column 15 Line 53 and Column 21 Line 3 - Column 22- Line 35);

(c) a sizing cage subsystem (Figure 4 Item 23) surrounding said extruded film tube and including an electrically-actuable and controllable actuator for moving said sizing cage inward and outward relative to said extruded film tube (Column 7 Lines 15-35);

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(d) a at least one first non-contact sensor for measuring a distance between said cage subsystem and said extruded tube (Figure 4 Item 89);

(f) wherein said executable program instructions include a cage position control routine which is capable of utilizing said sizing cage subsystem-to-tube distance to control a location of said sizing cage subsystem when moving said sizing cage subsystem from a first position to a second position (Column 6 Line 44 - Column 7 Line 2) during startup and resizing of said extruded film tube.

However, Joseph does not teach at least one additional non-contact sensor for measuring a diameter of said extruded tube; and that said at least one additional sensor includes at least second and third non- contact sensors that are located in fixed positions equally spaced around said sizing cage subsystem.

In analogous art pertaining to blown tubes, Schott teaches second and third non-contact sensors located in fixed positions equally spaced around the sizing subsystem (Figures 2 and 4 Items 22) for measuring a diameter of an extruded tube and comparing the final diameter produced to a desired diameter and operating based on the diameter sensed (Column 5 Lines 9-52).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to apply Schott to Joseph for the benefit of increasing control of the blown tube diameter.

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11. Regarding Claim 3, Joseph teaches that said at least one first non-contact sensor is mounted to a moving arm of said sizing cage subsystem, wherein movement of said sizing cage subsystem results in a corresponding movement of said first non-contact sensor (Figures 4 and 7A).

12. Regarding Claims 6-11, 16-19, and 22 each of these claims is recited in terms of intended use with respect to what is programmed into the cage position control routine and do not appear to require any structural features not present in the hypothetical combination applied to Claim 1 above. Thus, since Joesph generally teaches that the cage position routine is capable of utilizing the actuator to reposition the sizing cage in response to a predetermined set point through a series of steps (Column 6 Line 44 - Column 7 Line 2) and that during operation a user is permitted to introduce values to move the sizing cage (Column 18 Lines 25-45), the hypothetical combination as applied to Claim 1 above is considered capable of meeting the intended use limitations of Claims 6-11 and 16-19, and 22.

13. Regarding Claim 20, as Schott teaches that fixed sensor positions are used to enable control of blow tube diameters, it would have been obvious to the skilled artisan to arrange it so said at least one first and said at least one additional sensors are mounted a fixed vertical distance apart to further enable proper control of blown tube diameters.

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14. Regarding Claim 21, while a relative positioning of the sensors in the hypothetical combination is not expressly taught, it would have been obvious to a person having ordinary skill in the art at the time of the invention to make said at least one first sensor be mounted below said at least one additional sensor, since there are a limited number of finite and predictable relative arrangements between the two sensors – it would have been obvious to try any of the three predictable options of above, below, or on the same level when mounting the sensors.

### ***Response to Arguments***

15. Applicant's arguments filed June 12, 2009 have been fully considered but they are not persuasive. Namely, as discussed above, Applicant's arguments are directed toward the fact that the applied references do not contemplate the newly-recited intended use limitations, which the Examiner does not currently find to require any structural differences from the applied art.

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN OCHYLSKI whose telephone number is 571-270-7009 and whose direct fax number is 571-270-8009. The examiner can normally be reached on Monday through Thursday and every other Friday from 9:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Del Sole can be reached on 571-272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

rmo

/Joseph S. Del Sole/  
Supervisory Patent Examiner, Art Unit 1791